

Title (en)
ABSORPTION HEAT PUMP DEVICE

Title (de)
ABSORPTIONSWÄRMEPUMPENVORRICHTUNG

Title (fr)
DISPOSITIF DE POMPE À CHALEUR À ABSORPTION

Publication
EP 3306229 A4 20180530 (EN)

Application
EP 16830313 A 20160712

Priority
• JP 2015147593 A 20150727
• JP 2016070596 W 20160712

Abstract (en)
[origin: EP3306229A1] An absorption heat pump device capable of suppressing a reduction in performance as the absorption heat pump device resulting from improper control of the concentration of an absorbing liquid due to the inclination, shaking, etc. of a vehicle body at the time of mounting the absorption heat pump device on a vehicle is provided. An absorption heat pump device (100) in which an absorbing liquid absorbs refrigerant vapor includes an evaporator (30) that evaporates a refrigerant and an absorber (40) in which the refrigerant vapor evaporated in the evaporator is absorbed by the absorbing liquid. The absorber includes a heat exchange section (42) that removes absorption heat of the refrigerant vapor into the absorbing liquid and a membrane member (45), disposed so as to surround and cover the heat exchange section that the absorbing liquid contacts, through which the refrigerant vapor can pass but the absorbing liquid cannot pass.

IPC 8 full level
F25B 15/14 (2006.01); **F25B 33/00** (2006.01); **F25B 37/00** (2006.01); **F25B 15/00** (2006.01); **F25B 15/06** (2006.01)

CPC (source: EP US)
B60H 1/32011 (2019.04 - EP); **F25B 15/14** (2013.01 - EP US); **F25B 30/04** (2013.01 - US); **F25B 33/00** (2013.01 - EP US); **F25B 37/00** (2013.01 - EP US); **F25B 15/004** (2013.01 - EP US); **F25B 15/06** (2013.01 - EP US); **F28D 21/0015** (2013.01 - US); **Y02A 30/27** (2017.12 - EP US); **Y02B 30/62** (2013.01 - EP US)

Citation (search report)
• [XYI] DE 102011110018 A1 20130214 - AAA WATER TECHNOLOGIES AG [CH]
• [Y] US 2015168029 A1 20150618 - TSUBOUCHI OSAMU [JP]
• [A] US 2013062794 A1 20130314 - TSUBOUCHI OSAMU [JP]
• [A] JP 2015004481 A 20150108 - AISIN SEIKI
• See references of WO 2017018208A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3306229 A1 20180411; **EP 3306229 A4 20180530**; **EP 3306229 B1 20200226**; CN 107735627 A 20180223; CN 107735627 B 20201208; JP 2017026260 A 20170202; JP 6432462 B2 20181205; US 10619893 B2 20200414; US 2018163999 A1 20180614; WO 2017018208 A1 20170202

DOCDB simple family (application)
EP 16830313 A 20160712; CN 201680038294 A 20160712; JP 2015147593 A 20150727; JP 2016070596 W 20160712; US 201615580822 A 20160712